

LPDES PERMIT NO. LA0000914, AI No. 1395

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT MODIFIED LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

- I. Company/Facility Name:** Lion Copolymer, LLC
 Baton Rouge Plant
 5955 Scenic Highway
 Baton Rouge, LA 70805-2044
- II. Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
 Office of Environmental Services
 Post Office Box 4313
 Baton Rouge, Louisiana 70821-4313
- III. Prepared By:** Jenniffer Sheppard
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 Water Permits Division
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Date Prepared: January 23, 2008

IV. Permit Action/Status:

A. Reason For Permit Action:

Modification of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit following regulations promulgated at LAC 33:IX.3105/40 CFR 124.5. In accordance with LAC 33:IX.3105.B.2, only those permit limitations and conditions pertaining to the draft modification(s) are open for public comment.

- * In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 33:IX.11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. NPDES permit -** NPDES permit effective date: N/A
 NPDES permit expiration date: N/A
 EPA has not retained enforcement authority.

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- C. LPDES permit - LPDES permit effective date: September 1, 2007
 LPDES permit expiration date: August 31, 2011
- D. Application received on January 11, 2008.

V. Facility Information:

- A. Location - 1836 Shada Avenue in Baton Rouge
- B. Applicant Activity -

According to the application, Lion Copolymer, LLC, Baton Rouge Plant, is a synthetic rubber manufacturing facility that manufactures 1,250,000 pounds per day of styrene/butadiene (SBR) and 500,000 lbs/day of acrylonitrile/butadiene (NBR) rubber by an emulsion process.

- C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline

Rubber Manufacturing Point
 Source Category, Subpart B
 Emulsion Crumb Rubber Subcategory.

Reference

40 CFR 428.22 (BPT),
 428.23 (BAT)

Process Flow - 2.272 MGD (Max 30 Day Flow)

The permittee is a member of the Rubber Manufacturing Point Source Category. Final effluent limitations guidelines for this industry were promulgated February 21, 1974. The permittee is subject to the effluent limitations at 40 CFR 428, Subpart B, Emulsion Crumb Rubber Subcategory, for the manufacturing of styrene/butadiene rubber (SBR). However, this category specifically excludes the applicability of these guidelines to the manufacturing of acrylonitrile/butadiene rubber (NBR), which is equal to approximately 29% of the plant's daily production capacity. Therefore, current limitations were based on a combination of promulgated guidelines and best professional judgment (BPJ), in accordance with LAC 33:IX.2707 and LAC 33:IX.3701.

Other sources of technology based limits:

LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).
 Best Professional Judgement

- D. Fee Rate -
1. Fee Rating Facility Type: major
 2. Complexity Type: V
 3. Wastewater Type: II
 4. SIC code: 2822
- E. Continuous Facility Effluent Flow - 2.7 MGD (Max 30-Day).

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VI. Receiving Waters: Monte Sano Bayou, thence to the Mississippi River

1. TSS (15%), mg/L: 22.80
2. Average Hardness, mg/L CaCO_3 : 148.46
3. Critical Flow, cfs: 0.91
4. Mixing Zone Fraction: 1
5. Harmonic Mean Flow, cfs: 4.0
6. River Basin: Mississippi River, Segment No. 070504
7. Designated Uses:

The designated uses are secondary contact recreation and limited aquatic life and wildlife use.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from monitoring station number 1115 at Scenic Highway, just South of Lion Copolymer, 1.2 miles south of Scotlandville, Louisiana listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This information was also provided in a memorandum from Brian Baker (LDEQ) to Jennifer Sheppard (LDEQ) dated January 9, 2007 (See Appendix D).

VII. Nature of Permit Modification:

Lion Copolymer has indicated that power plant blowdown (boiler blowdown) is not discharged through Outfalls 010 and 014, but is still being discharged through Outfall 020. The appropriate deletions (outfall description changes and TSS limitations) for Outfalls 010 and 014 have been addressed by this modification. The current permit, effective September 1, 2007, addressed power plant blowdown from Outfall 020 and established the appropriate TSS limitations. No changes will be made to Outfall 020, therefore, no portion of Outfall 020 will be open for comment.

- A. Outfalls 010 and 014 - Lion Copolymer has indicated that power plant blowdown (boiler blowdown) is not discharged through these outfalls. Therefore, the outfall descriptions have been updated to remove power plant blowdown as a contributing source.
- B. Outfalls 010 and 014 - TSS limitations were originally established due to power plant blowdown discharges. Therefore, TSS has been removed as a parameter from these outfalls.

VIII. Modified Outfall Information:

Outfall 010

- A. Type of wastewater - the combined discharge of stormwater, well water, and condensate.
- B. Location - at the point of discharge from Collection Basin No. 10, prior to combining with other waters, at Latitude 30°30'04", Longitude 91°10'24".
- C. Treatment - None

*commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basin) is routed to the biological treatment system and discharged through Outfall 001.
- D. Flow - Intermittent

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- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

Outfall 014

- A. Type of wastewater - the combined discharge of stormwater, well water, and condensate.
- B. Location - at the point of discharge from Collection Basin No. 14, prior to combining with other waters, at Latitude 30°30'06", Longitude 91°10'35".
- C. Treatment - None

 *commingled first flush wastewater (the first 0.1 to 0.6 inches of effluent from the collection basin) is routed to the biological treatment system and discharged through Outfall 001.
- D. Flow - Intermittent
- E. Receiving waters - Monte Sano Bayou, thence to the Mississippi River
- F. Basin and segment - Mississippi River Basin, Segment 070504

IX: Permit Limit Rationale:

Technology Basis

Outfalls 010 and 014 - Utility Wastewaters & Stormwater

***Outfalls 010 and 014** - the combined discharge of stormwater, well water, and condensate.

Utility wastewaters being discharged to discrete outfalls receive BPJ limitations/monitoring requirements according to the following schedule:

<u>PARAMETER</u>	<u>MONTHLY AVERAGE</u> (Mg/L)	<u>DAILY MAXIMUM</u> (Mg/L)
Flow	Report	Report
TOC	---	50
Total Residual Chlorine	---	Report
Oil & Grease	---	15
pH, Std. Units	6.0 (min)	9.0 (max)

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Site-Specific Consideration(s) for Outfalls 010 and 014

Flow - established based on LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease - The daily maximum limitations have been retained from the current LPDES permit, effective December 1, 2001. These limitations are consistent with similarly permitted discharges.

Total Residual Chlorine - Monte Sano Bayou is on the 303(d) list as being impaired for chlorine. Based on an addendum to the LPDES permit application, dated February 26, 2007 indicating that Sodium hypochlorite (10-12% concentration) has been used in the fire water systems as a biocide, it has been determined that there is a reasonable potential for chlorine to be present in this discharge. Therefore a Total Residual Chlorine monitor and report only requirement has been established in order to collect data for Total Maximum Daily Load (TMDL) development.

pH - established in accordance with LAC 33:IX.1113.C.1.

Water Quality Basis

No additional water quality requirements have been added as a result of this permit modification.

X. Monitoring Frequencies:

* **Outfall 010** - the combined discharge of stormwater, well water, and condensate.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective September 1, 2007.

Oil & Grease - A monitoring frequency of 1/week for Oil & Grease has been retained from the current LPDES permit, effective September 1, 2007.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/week
pH	1/week
Oil & Grease	1/week

TOC - A monitoring frequency of 1/month for TOC has been retained from the current LPDES permit, effective September 1, 2007.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
TOC	1/month

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data collection guidance for Total Maximum Daily Load (TMDL) development. This requirement has been retained from the current LPDES permit, effective September 1, 2007.

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<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Total Residual Chlorine	1/quarter

***Outfall 014** - the combined discharge of stormwater, well water, and condensate.

Flow and pH - A monitoring frequency of 1/week for Flow and pH has been retained from the current LPDES permit, effective September 1, 2007.

TOC - A monitoring frequency of 1/week for TOC has been retained from the current LPDES permit, effective September 1, 2007.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Flow	1/week
pH	1/week
TOC	1/week

Oil & Grease - A monitoring frequency of 1/month for Oil & Grease has been retained from the current LPDES permit, effective September 1, 2007.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Oil & Grease	1/month

Total Residual Chlorine - A monitoring frequency of 1/quarter for the following listed pollutant is considered adequate for the protection of the receiving water, its designated uses as stated in Section VI.7, and is consistent with current data collection guidance for Total Maximum Daily Load (TMDL) development. This requirement has been retained from the current LPDES permit, effective September 1, 2007.

<u>PARAMETER</u>	<u>MONITORING FREQUENCY</u>
Total Residual Chlorine	1/quarter

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XI. COMPLIANCE HISTORY/DMR REVIEW:

- A. A DMR review was done covering the period since the effective date of the permit, September 1, 2007. The following excursions were reported:

DATE	OUTFALL	PARAMETER	REPORTED VALUE	PERMITTED VALUE
10/01/07	010	TSS	35.1 mg/L, monthly average	30.0 mg/L, monthly average
11/01/07	010	TSS	56.6 mg/L, monthly average	30.0 mg/L, monthly average

- B. Compliance History - None

XII. "IT" Questions - Applicant's Responses

IT Questions were answered as part of Lion Copolymer's initial LPDES permit renewal, effective on September 1, 2007. Please refer to Appendix D in the LPDES Permit Renewal Application, dated November 2006.

XIII. Endangered Species:

The receiving waterbody, Subsegment 070504 of the Mississippi River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIV. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to permit for the discharge described in the application.

XVI. Variances:

No requests for variances have been received by this Office.

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XVII. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet and rationale. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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